

POWER SECTION

Model No: AT475782.9

Revised: 9/22/2020

Rotor Specifications	
	inches
Overall Length	242.00
Contour Length	236.00
Major Diameter	2.798
Eccentricity	0.163
Head diameter	2.850
Thread Form	2.375 HEF
Weight	339 lbs
Material	17-4 PH ¹

Stator Specifications	
	inches
Overall Length	250.00
Tube OD	4.75
Tube ID	3.75
Rubber Cutback Top/End	8.00 / 8.00
Weight	541 lbs
Number of Stages	2.9
Tube Material	4140/4142 Alloy Steel
Rubber Options	NBR-HPW & NBR-HPO

NBR-HPW (in)		Fits (+ Compression / - Loose)				
Size	Minor ²	75 °F	125 °F	175 °F	250 °F	300 °F ³
.5 US						
STD	2.475	-0.002	0.013	0.027	0.049	0.064
.5 OS	2.485	-0.012	0.003	0.017	0.039	0.053
1.0 OS	2.495	-0.022	-0.008	0.007	0.029	0.043
1.5 OS	2.501	-0.028	-0.014	0.001	0.022	0.037
2.0 OS						
2.5 OS						

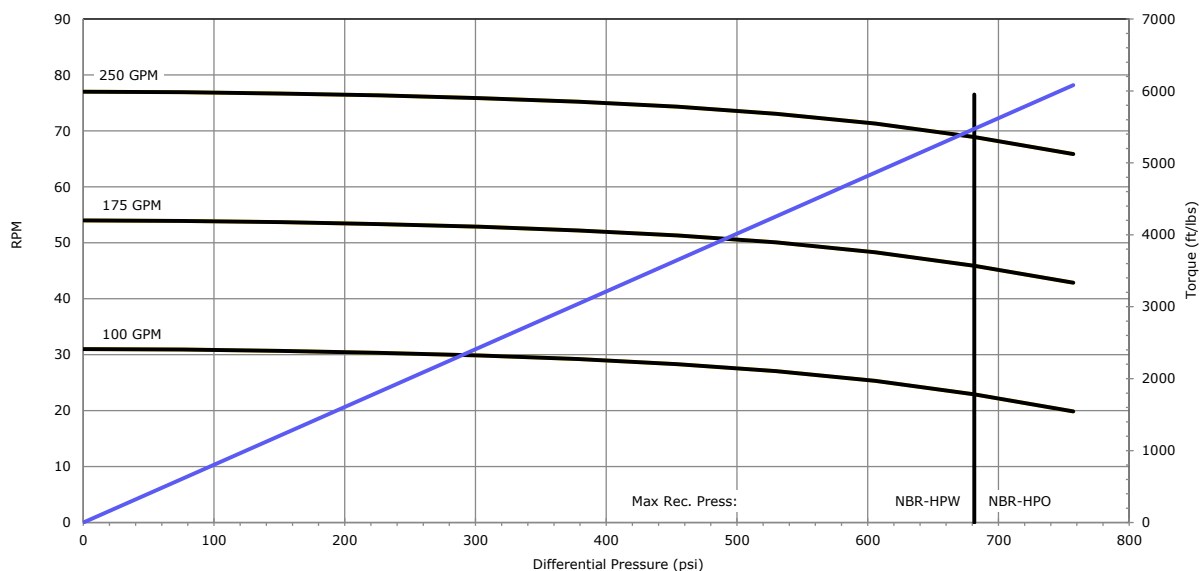
NBR-HPO (in)		Fits (+ Compression / - Loose)				
Size	Minor ²	75 °F	125 °F	175 °F	250 °F	300 °F ³
.5 US						
STD	2.475	-0.002	0.013	0.027	0.049	0.064
.5 OS	2.485	-0.012	0.003	0.017	0.039	0.053
1.0 OS	2.495	-0.022	-0.008	0.007	0.029	0.043
1.5 OS	2.501	-0.028	-0.014	0.001	0.022	0.037
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (gpm)	100 - 250
Speed Range (rpm)	30 - 80
Torque Slope (ft-lb/psi)	8.03
Rotation (rev/gal)	0.306
Off Bottom Pressure (psi)	40

Performance Details		NBR-HPW	NBR-HPO
Max Diff Press (psi)		690	690
Stall Diff Press (psi)		1080	1080
Max Torque (ft-lb)		5480	5480
Stall Torque (ft-lb)		8620	8620

■ (NBR-HPW/HPO)

■ Torque



¹ Coating options of chrome or tungsten carbide are available ² Vector Gauge Readings at Room Temp 75°F ³ BHCT Exceeding 320°F will void warranty for NBR-HPW/HPO.

Performance curves are based on new rotor and stator dimensions and for reference only. Actual performance may vary depending on fit and drilling conditions. The stall torque may exceed that specified for the connected components. Operating over the recommended limits may result in damage to the power section and connected components. Please visit www.AbacoDrilling.com for the latest specification revisions.

LOCATIONS

US: Headquarters 713 Northpark Central Dr., #400 Houston, TX 77073 - Tel: (281) 869-0700 - Fax: (281) 869-0701
 US: Sales & Distribution 11308 West Interstate 20 East, Odessa, TX 79765 - Tel: (432) 248-1814
 CANADA: Stator Manufacturing 6303-39th Street Leduc, Alberta T9E 0Z3 Canada - Tel: (780) 986-8947 - Fax: (780) 986-8842
 DUBAI UAE: Stator Manufacturing Oilfields Supply Center B#57, Jebel Ali, Dubai UAE, P.O. Box 19909 - Tel: 971-4-870-8600

POWER SECTION - METRIC

Model No: AT475782.9

Revised: 9/22/2020

Rotor Specifications	
	mm
Overall Length	6146.8
Contour Length	5994.4
Major Diameter	71.07
Eccentricity	4.13
Head diameter	72.39
Thread Form	2.375 HEF
Weight	154 kg
Material	17-4 PH ¹

Stator Specifications	
	mm
Overall Length	6350.0
Tube OD	120.7
Tube ID	95.3
Rubber Cutback Top/End	203.0 / 203.0
Weight	245 kg
Number of Stages	2.9
Tube Material	4140/4142 Seamless Alloy Steel
Rubber Options	NBR-HPW & NBR-HPO

NBR-HPW (mm)		Fits (+ Compression / - Loose)				
Size	Minor ²	25 °C	75 °C	100 °C	125 °C	150 °C ³
.5 US						
STD	62.87	-0.05	0.62	0.95	1.29	1.63
.5 OS	63.12	-0.30	0.36	0.69	1.03	1.36
1.0 OS	63.37	-0.56	0.10	0.43	0.76	1.09
1.5 OS	63.53	-0.71	-0.05	0.27	0.60	0.93
2.0 OS						
2.5 OS						

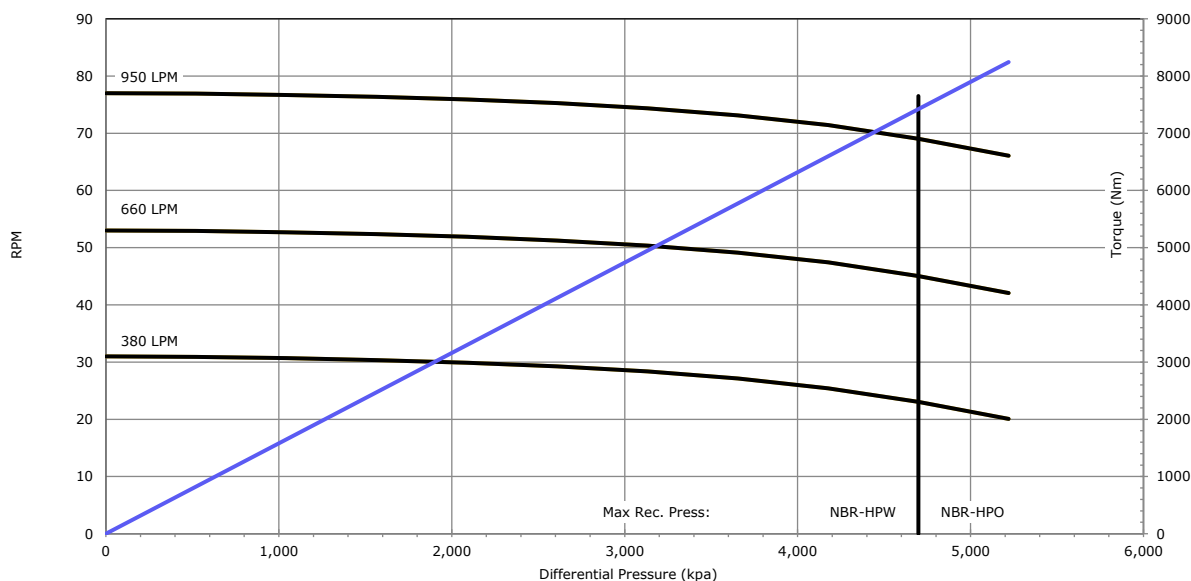
NBR-HPO (mm)		Fits (+ Compression / - Loose)				
Size	Minor ²	25 °C	75 °C	100 °C	125 °C	150 °C ³
.5 US						
STD	62.87	-0.05	0.62	0.95	1.29	1.63
.5 OS	63.12	-0.30	0.36	0.69	1.03	1.36
1.0 OS	63.37	-0.56	0.10	0.43	0.76	1.09
1.5 OS	63.53	-0.71	-0.05	0.27	0.60	0.93
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (lpm)	380 - 950
Speed Range (rpm)	30 - 80
Torque Slope (Nm/kpa)	1.58
Rotation (rev/Liter)	0.0808
Off Bottom Pressure (kpa)	240

Performance Details		
	NBR-HPW	NBR-HPO
Max Diff Press (kpa)	4700	4700
Stall Diff Press (kpa)	7400	7400
Max Torque (Nm)	7500	7500
Stall Torque (Nm)	11700	11700

■ (NBR-HPW/HPO)

■ Torque



¹ Coating options of chrome or tungsten carbide are available ² Vector Gauge Readings at Room Temp 25°C ³ BHCT Exceeding 160°C will void warranty for NBR-HPW/HPO.

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